

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
Alliant International University	Each teacher credential candidate is required to demonstrate proficiency in the integration of technology into the classroom prior to recommendation for an initial teaching credential. The university's course on Technology in the Curriculum has been designed to work in tandem with other courses in the Teacher Education program, with assignments that reinforce concepts covered in class and providing adequate practice of those concepts. Candidates are trained to be proficient in the software, multimedia tools and programs for classroom administration so that they can effectively integrate these components into student learning and effective management of the classroom. To assure understanding and the ability to successfully integrate technology, candidates are required to create a Technology Integration website that includes a multimedia project, personal website and student assignments directly related to the candidate's teaching situation. Assignments in seminar courses also require that candidates explicitly show how to embed technology into the curriculum to support learning and achievement.
Azusa Pacific University	Every class we offer has I.S.T.E. technology standards and technology elements fully integrated with signature assignments that address the California technology standards. Every syllabus reflects the technology signature assignments. All technology signature assignments are submitted online to TaskStream, and assessors are trained to score them. Additionally instructors are encouraged to fully incorporate and model best practices and professional development is provided regularly to support this expectation. Teacher candidates are expected to use all fields of technology as well as a variety of hardware and software. Special Education programs expect candidates to use the internet as a resource, online library, include video clips and power point presentations for assignments. Instructors utilize every source of technology for instructional presentations including digital projectors, iPads, iPods, digital learning (eCompanion and eCourse), video clips, power point presentations and pod casts. Guest speakers introduce candidates to assistive technologies available to students with special needs. The Special Education staff and leadership team collaborate bi-monthly as well as ongoing through Skype, email, small group conferences to remain on the cutting edge and current innovative educational practices.
Brandman University	Candidates in the credential programs take EDUU 551-Educational Applications of Computers. In this course candidates learn how to use technology to utilize interactive tools such as wikis, blogs, and threaded discussions. Candidates also learn how to integrate technology into lesson planning, develop multimedia presentations, and use databases and spreadsheets to gather and analyze data on student performance. In EDUU 511-Collaboration for Inclusive Schooling candidates learn about assistive technologies appropriate for students with special needs. Candidates examine and use WebQuests in EDUU 512- The Art and Craft of Teaching. Technology is also integrated into each of the core content courses of the credential programs. In the special education program candidates use computer based programs such as DIBELS and Chart Dog and learn how to use various software programs for analyzing the results from standardized assessments such as the Woodcock-Johnson assessment battery. Additionally, each course in the credential program, other than student teaching, is currently taught in a blended format. Fifty percent of the class is taught face to face, and fifty percent of the class is taught online. Blended courses provide candidates with an opportunity to use a variety of technology tools including threaded discussions, wikis, blogs, voice boards, videoconferencing and online tutorials.
California Baptist University	Integrating Technology Candidates are prepared to integrate the following technologies into curricula and instruction: - Cameras (e.g., digital, video, and document) - Operating system software (i.e., Windows, Mac OS, Linux) - Applications software (i.e., word processing, spreadsheets, database management, presentation software) - Computer managed instructional software (e.g., grade keeping, database queries, productivity software, etc.) - Computer assisted instructional software (e.g., assistive technology, electronic portfolios, etc.) - Types of educational software (i.e., drill and practice, tutorials, problem-solving software, simulations, microcomputer-based laboratories, multimedia applications, educational games) - Ethical issues (Privacy Invasion, Computing Inequities, Information Overload, Security: Hacking and Cracking, Computer Viruses, Student Internet Safety)

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
	<p>Issues, Netiquette Issues, Plagiarism & Copyright Issues)</p> <ul style="list-style-type: none"> - Internet research skills (application of search engines, subject directories, meta search engines and Boolean logic) - Various technology tools (Web 2.0 applications, assistive technology, smart classrooms, collaboration tools) <p>Collecting, Managing, & Analyzing Data</p> <p>Candidates are instructed in the use of computer applications such as spreadsheets and databases for the following tasks:</p> <ul style="list-style-type: none"> - Designing format for data entry - Inputting data - Developing formulas and functions (spreadsheets) - Performing queries to filter comparison data (databases) - Creating summative reports for feedback purposes and to inform/modify instruction <p>Universal Design</p> <p>Candidates are introduced to the concept of universal design through the following activities:</p> <ul style="list-style-type: none"> - Multimedia-based assistive technology projects - Discussion of ergonomics, classroom/lab configurations ensuring equal access.
California Lutheran University	<p>The use of technology as a teaching and as a management tool is integrated throughout the multiple and single subject coursework. Within the past few years, the majority of our candidates come to the program equipped with knowledge and ability to word process and use productivity tools such as Word, Excel, and PowerPoint. Candidates upload their course assignments on an electronic course management system (BlackBoard and TaskStream), which requires a working knowledge of word-processing, cutting /pasting, uploading, and linking skills. The Graduate School of Education uses TaskStream, an electronic depository for signature assignments, Teacher Performance Assessments (TPAs), and field evaluations. This permits the department to collect meaningful data which can be aggregated and analyzed to support decision-making.</p> <p>During the orientation to methods coursework, Multiple and Single Subject candidates receive information as to the uploading of their assignments to TaskStream. In order to do so, all candidates must be at the basic level of computer literacy and know how to:</p> <ul style="list-style-type: none"> • Operate a computer • Find and use software applications such as Word • Access the Internet • Utilize email <p>In the Special Education programs, all faculty and teacher candidates use Blackboard as their course management system.</p> <p>In the (elementary) English language skills and reading development course, Multiple Subject candidates research various Internet sites as possible resources for technology-related materials, such as those available on the site established by the American Library Association displaying literary award winners.</p> <p>In that same course, Multiple Subject candidates are required to include methods of evaluation as well as adaptations for Universal Access and intervention strategies, and a description of computer technology applications that are aligned with Reading/Language Arts standards that add value to student learning.</p> <p>In another course, elementary teacher candidates develop a lesson plan to integrate technology into the content area. The lesson plan must include learning goals for both content area and technology and must include an activity for the K-12 student to produce a digital artifact.</p> <p>In the secondary course covering the planning and methods for content standards, secondary teacher candidates learn basic methods of planning and instruction. Candidates are required to plan lessons for their student teaching with an emphasis on increased academic achievement in the secondary school that includes technology enhanced methods and strategies necessary to develop achievement in all learners.</p> <p>Teacher candidates in the (secondary) literacy and language course use technology to teach reading comprehension strategies and skills during fieldwork</p>

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
	<p>placement. Technology resources are used to assist students in the 7-12th grade access grade-level content material in order to activate background knowledge, make connections within and across disciplines, synthesize information, build fluency, and evaluate content area documents. They incorporate into the lessons a variety of informational texts that include reference works, such as magazines, newspapers, and online information; instructional manuals; consumer, workplace, and public documents; signs; and selections listed in Recommended Literature, Pre-Kindergarten Through Grade Twelve. In the study of leadership theories, classroom management, discipline and lesson planning, Single Subject candidates explore classroom management strategies and legal decisions through Internet searches as well as identifying and developing a deeper understanding of universal access strategies. The candidates are required to create a database for resources as part of their teacher preparation and becoming a classroom teacher of record.</p>
<p>California State Polytechnic University, Pomona</p>	<p>A prerequisite course in education technology prepares candidates with a common set of knowledge and skills to integrate the use of technology into teaching and learning. The course is designed to meet the ISTE standards in education technology with additional experiences in common tools used in the program. The experiences include collecting and analyzing student data, becoming familiar with data collection systems in the region, and using the technology draw generalization and specific recommendations for improving instruction. Additional course tools include the use of Task Stream, the candidate and program assessment software, SMART boards, videoconferencing tools including Skype, internet-based resources, as well as other teaching-specific tools found in our local school districts. All professional program courses have the appropriate use of technology embedded into the teaching of core concepts. Teacher candidates are expected to use technology as teaching and learning tool in their lesson planning and delivery. Technology is also used to manage instruction with teacher candidates and to provide experiences within courses on effective teaching and learning in online environments. Blackboard course management software is commonly used in local school districts as well as being the platform of choice in the university. The key to its use is both learning to use the tool-- and using the tool to learn. Credential programs are exploring better ways to use Educational Results Partnership (www.edresults.org), a meta database that contains demographic and achievement data from local schools presented in a variety of ways from the classroom level to the school, district, and county levels. Candidates look at aggregated student learning data, comparing low performing schools in the region, and map school profiles as methods to learn about improving school and student performance.</p>
<p>California State University, Bakersfield</p>	<p>Students and instructor use LiveText as a tool to improve teaching and learning through ongoing assessment. This tool allows assignment submission, comments from instructors for revisions, and data management. Instructors and programs use the data on student learning outcomes collected through the tool for reviewing and assessing teaching and learning. Additionally, technology is integrated throughout the programs. Students use online discussions, research databases, video cameras for lesson recording and analysis, podcasts and videocasts, presentation software, and more. Their assignments often require the incorporation of technologies ranging from WebQuests to podcasting</p>
<p>California State University, Channel Islands</p>	<p>Faculty members model teaching with technology through the use of Blackboard (a course management system that requires students to post discussions and papers electronically), electronic whiteboards, and laptops on a cart. Each program has set goals for improving the technological competence of candidates. In a collaboration with Google, CI faculty have received funding and support to expand the integration of technology in their instruction using Google tools and a variety of applications from other providers. Many of these strategies are easily adapted for use by our candidates, despite the varying levels of technology that might be available from their employer. Universal design is being utilized as a key component of instructional planning and Google has funded a faculty project to help facilitate an expansion of its use. Teaching and learning with technology is incorporated throughout each program, however, the opportunities to practice in local schools varies greatly across the school districts with many low tech and some high tech. Our candidates complete a teacher performance assessment through which candidates must collect data, manage and analyze data about their teaching and use the data reflect on the improvements that are needed to improve their teaching and the learning of the students in the class. The teacher performance lesson plans, videotape of lessons, data analysis, and reflections are all deposited electronically. We also rely on our school partners to prepare teachers to manage data (classroom data) via the specific data management systems that they have in place. Universal design is implemented in the lesson planning process and all programs incorporate the principles of universal design in lesson planning and instruction. We examine the effectiveness of teaching with technology across all programs by assessing candidates at</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	the end of program annually on the California standards for integrating technology into teaching.
California State University, Chico	<p>Faculty model effective use of technology in their own teaching, including the use of WebCT, Wimba, Smart Boards, clickers, Wikis, blogs, streaming video, podcasts, Skype, Second Life and Camtasia.</p> <ul style="list-style-type: none"> •Special education faculty received grants to make assistive software programs available to candidates in campus labs and in their school site classrooms. •Course assignments require candidates to explore resources and instructional plans available on the Internet, to integrate technology into lessons at their clinical sites, to create websites, and to use spreadsheets and/or grading programs for grading. •Candidates engage in learning activities related to the analysis of standardized test data from sites such as EduSoft. •Candidates complete a teaching performance assessment in which they analyze data from teacher made assessments and use the results to inform ongoing instruction. <p>Concurrent/Education Specialist Program</p> <p>Candidates develop their understanding of and abilities to apply technology and supplementary aids in instructional design for individuals with disabilities. Principles and practices of the use of technology in the classroom including distance communication; selecting appropriate hardware and software for assessment and data collection purposes; instructional strategies; the enhancement of critical thinking and problem solving skills; and assistive technology to meet the needs of students with disabilities. Technology for professional development is also emphasized.</p> <p>Universal Design for Learning (UDL) incorporates collaboration, technology, and dissemination of content and process. Our candidates are prepared to apply the principles of UDL that includes accessibility-related issues that interfere with student success. New and more accessible technologies and accommodations are presented in course content to assist all types of learning styles. Many university course websites are now developed with universal design elements embedded into the syllabus and course content.</p>
California State University, Dominguez Hills	<p>Candidates are required to meet basic requirements for technology proficiency through coursework including TED 420 Computer Literacy for Teachers, TED 411 Classroom Management, and TED 400 Introduction to Classroom Teaching (Level I competencies). In their methods coursework, they learn how to infuse technology into their lessons. In addition, they learn where to find data on state, district, and school-level performance on standardized tests. They practice using assessments in Reading/Language Arts, and use results to plan lessons. Candidates examine samples of district and school-level achievement data and incorporate these into signature assignments. In student teaching, they demonstrate their ability to integrate technology into their planning and instruction. Candidates are also using complex technology as they complete their coursework. Throughout the program, faculty and students use Blackboard as a method for communicating with candidates, posting and receiving assignments, and engaging students in dialogue. The program has also adopted TaskStream, an online system that allows candidates to create and submit assignments as part of the Performance Assessment for CA Teachers (PACT). Regarding Universal Design for Learning, all methods courses in each program follow similar templates for lesson planning, and these include prompts to plan for students with special needs and for those who are English learners. Candidates learn to apply multiple strategies to address the learning needs of all children in the classroom, including the use of realia and manipulatives, graphic organizers or representations, and small-group guided learning activities. A recently-awarded TTT grant will fund development of an online teacher preparation program, and we expect this to spur faculty engagement and candidate skill and capacity in new areas of technology.</p>
California State University, East Bay	<p>All candidates are required to complete a course in the use of technology in the classroom. Additionally, there is a state-mandated teaching performance assessment (TPA) which is integrated throughout the candidate's curricular program to assess the level that a candidate meets specific California teaching standards. The TPAs are submitted and monitored through the use of an online web portal for which all teaching credential candidates must hold a current subscription. All training and applicable materials are provided through the department.</p>
California State	<p>Interns are prepared to integrate technology through required coursework as well as through modeling the effective use of technology by faculty and supervising teachers. The required coursework in technology includes outcomes related to collecting, managing, and analyzing data to improve teaching and</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
University, Fresno	learning and to ultimately increase student achievement. Principals of universal design for learning are incorporated in both the required technology coursework as well as the required coursework in teaching students with special needs. As part of the CSU's Center for Teacher Quality, data is annually gathered by surveying graduates and their employers one year after completion. The data gathered from these surveys include analyses of technology knowledge and skills and are reviewed by faculty and used to make continual improvements in coursework and programs.
California State University, Fullerton	<p>All programs integrate at least the following: (a) Powerpoint for instructor and student presentations; (b) Word for instructor and student documents; (c) LMS for all electronic communication and collaboration between the instructor and students; (d) Internet search and retrieval for research; (e) electronic citation machines; (f) electronic gradebook for assessment and assignments management; and (g) web-based student handbooks and lesson plan.</p> <p>Department of Special Education:</p> <p>The use of technology is incorporated throughout the education specialist credential program in all three program areas. The following are examples of specific assignments embedded within credential coursework:</p> <ul style="list-style-type: none"> • SPED 433: Language Arts/Reading Instruction in Public Schools - students evaluate reading software • SPED 432: Mathematics and Science Curriculum and Instruction in Elementary Schools - students evaluate a piece of educational software and complete a website/software assignment where they examine modifications for English Learners and students with all types of disabilities • SPED 436: Literacy for Early Childhood Special Education - use a variety of interactive books and assistive technologies to teach emergent literacy to young children • SPED 482A and B: Curriculum and Methods for Individuals with Mild/Moderate and Moderate/Severe Disabilities - use of specific websites for IEP development and writing objectives • SPED 520: Assessment in Special Education - use of computer assisted scoring for standardized tests • SPED 504: Advanced Proficiency in Educational Technologies – use of a variety of assistive technologies to support students with disabilities <p>Department of Secondary Education:</p> <p>Candidates participate in online chat and discussion in EDSC 440S (General Pedagogy of Secondary School Teaching); utilize Word Processing and PowerPoint skills in the development of portfolio materials; develop technology-embedded instructional and assessment materials in EDSC 442 (Teaching in the Secondary School) and EDSC 449S (Seminar in Secondary Teaching); and utilize these skills and knowledge in their student teaching experience. Candidates are shown how to select and implement appropriate technological resources for specific concepts. Emphasis is placed on sequencing activities according to students' prior experiences, level of academic achievement, and developmental stage. Principles of Universal Design are emphasized in EDSC 440S and 442 by exposing students to strategies and technologies they should use to ensure learning is accessible to all students. All candidates who complete EDSC 304 (Personal Proficiency in Educational Technology for Secondary Teachers) to meet their computer technology requirements participate in the Intel Teach to the Future program. This exceptional program addresses content standards and national technology standards in every activity. Intel Teach to the Future is part of the Intel® Innovation in Education initiative, a global, multi-million dollar effort to help realize the possibilities of technology education. Participating teachers receive extensive training and resources to promote effective technology use in the classroom. As of July 2010, over 1,700 Cal State Fullerton Single Subject Credential Candidates who successfully completed EDSC 304 are part of that population. Note that candidates may also demonstrate fluency in the skills required by the CCTC (met by passage of EDSC 304) through successful passage of the appropriate CSETs.</p>
California State University, Long Beach	Candidates in the Education Specialist program are prepared to effectively use technology. All students take an instructional technology course as a prerequisite. Additionally, several of our courses include the specific use of assistive technology for students with disabilities. In our assessment course as well as our methods course students are taught to use technology to collect, manage, and analyze data to improve teaching and learning. All Education Specialist assessment and methods courses address the importance of Universal Design for Learning.

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
	<p>In the Multiple Subject program, through three prerequisite courses candidates begin thinking about preparing students for a technological world. Applications and understanding of computer technology are integrated into all core courses through classroom learning activities, assignments and fieldwork experiences. In addition, candidates evaluate technology resources (e.g., websites, software, online resources) for their effectiveness in enhancing reading instruction and observe and reflect on teacher’s use of technology in reading and language arts instruction in the related pedagogy courses. During the fieldwork experiences, candidates observe mathematics instruction including the use of technology in an elementary/middle school classroom or computer lab at a time when mathematics is addressed. In many of the urban schools in our local area, computer equipment is not available to all children. The candidates, then, will have first-hand experience of the “digital divide” and will have opportunities to discuss this issue in class as well as reflect upon it in their written assignments. Student teaching also provides opportunities for students to demonstrate mastery of Excel software to create databases, charts, and graphs to record and analyze student data.</p> <p>In the Single Subject program candidates take a co-requisite educational technology course in which they study in-depth how to use technology as a teaching and administrative tool, and how to bring issues of 21st century technology into the secondary classroom. Applications and understanding of computer technology are integrated into all core courses through classroom learning activities, assignments and fieldwork experiences. In many of the urban schools in our local area, computer equipment is not available to all children. The candidates, then, will have first-hand experience of the “digital divide” and will have opportunities to discuss this issue in class as well as reflect upon it in their written assignments. Signature assignments in courses throughout the program and student teaching provides opportunities for students to demonstrate mastery of video cameras, smart boards, charts, data bases, graphs and the ability to use data to analyze student learning and teacher effectiveness.</p>
California State University, Los Angeles	<p>The Charter College of Education (CCOE) asks all candidates entering the elementary (multiple subject), secondary (single subject) and special education (education specialist) credential programs to verify a basic level of proficiency in technology. Once in the credential programs, candidates complete required coursework in the use of technology for educational purposes. Faculty model the use of technology for improving teaching and learning in their professional practices. In general education credential programs, all students are required to take and pass four (4) different performance assessments, California Teaching Performance Assessments (TPAs) that measure the application of their knowledge, skills and dispositions. Passage rates of the California TPAs are reviewed and analyzed for purposes of program improvement. Task Stream is used by students and faculty to upload student work samples and to track student progress. Faculty also model the effective use of technology in online and hybrid course offerings, including the use of Skype, blogs, podcasts, online threaded discussions and chats, and other related technologies. Intern candidates receive additional support from on-site support providers while they are teachers of record in their classrooms. The California State University (CSU) Center for Teacher Quality (CTQ) assists each CSU campus, including CSULA to collect data from credential program completers and their principals about how well prepared they are once they have been teaching for a year. These data are reviewed by the campus administration and the faculty for purposes of ongoing program improvement.</p>
California State University, Monterey Bay	<p>Candidates are required to complete a course in technology for all programs, at the preliminary level of the credentialing process.</p>
California State University, Northridge	<p>Faculty model the use of technology in every day instruction by using Moodle, Webct or Blackboard to post assignments, support structured on-line discussions, show videos, have live conferences through Elluminate and a variety of other applications. The university and the MDECOE have significantly increased the push toward using technology for instruction over the past five years. Most departments have “gone green” in that all syllabi, handouts or paperwork must be posted on line. Several teacher education faculty provide professional development in technology to the university such as online professional development for all faculty and staff and university-wide workshops on Elluminate. The Secondary Education department offers a masters in Educational Technology. Many courses are provided either entirely on line or in hybrid form. Technology is also used in assessing all teacher preparation</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	candidates through PACT (Performance Assessment for California Teachers) in which Task Stream is used for the submission of Teaching Events.
California State University, Sacramento	All of the Sacramento State, College of Education credential candidates are required by state standards to learn how to effectively integrate technology in curriculum and instruction and to utilize it for purposes of data collection, management and analysis focused on improving teaching and learning. This is accomplished in our programs through a required technology course and infusion of the knowledge and skills required throughout methodology courses and student teaching. Our electronic portfolio tool, Taskstream, meets Universal Design guidelines, and UDL principles are taught and supported in other courses. Our belief is that technology should assist educators in “redesigning” their curriculum to meet student learning needs.
California State University, San Bernardino	All candidates must complete a Technology proficiency pre-requisite. Technology is infused throughout all curriculum and coursework.
California State University, San Marcos	All candidates complete a prerequisite course in technology and technology applications for public schools and classrooms. The integration of technology is infused throughout the program and is a focus of observations in clinical practice. In addition to the California Teacher Performance Expectations standards, our programs include a standard for Technology in Teaching and Learning. We have begun a systematic effort to provide significant professional development to all faculty in the area of technology instructional tools so that course instructors regularly model effective instruction through appropriate use of technology tools.
California State University, Stanislaus	The program introduces candidates to current technology applications that address student learning. Candidates demonstrate understanding via projects and lessons in which technology promotes understanding of concepts. Various web-based and other technologies such as student response systems are used to collect data regarding teaching and learning. Principles of universal design are required in all lessons planned by our credential candidates. Candidates use Taskstream to manage data and progress, modeling how similar technology can be used in the K-12 environment.
CalState TEACH	<p>Technology Best Practice</p> <p>The online component of the CalStateTEACH curriculum develops the technological proficiency of candidates through a combination of face-to-face instruction, print and electronic instructional materials, practical applications, and extensive engagement with an online learning environment. Use of a wide variety of computer hardware and software is integral to the program and required for success.</p> <p>Interaction using email and collaborative tools including threaded discussions is fundamental within the CalStateTEACH program. Candidates are provided face-to-face training in these skills during a one-day orientation conducted prior to beginning the program. Proficiency is developed through the continued use of email for communication and collaboration with peers and faculty, and through electronic submission of assignments. Academic feedback is also provided electronically. In addition to email communication, candidates participate in structured and unstructured threaded-discussions throughout the course of the program. In total, candidates are required to participate actively in a minimum of 15 curriculum related discussions. In addition, the structure of the program requires that candidates become proficient with a variety of online tools to create lesson plans and instructional units, develop electronic portfolios, and compile and distribute shared curriculum resource collections. Each of the subject-specific all day seminars (language acquisition, reading, science, mathematics, visual and performing arts, and physical education) models the use of a variety of technologies for teaching and learning. Presenters address the use of technology in subject-specific pedagogy, and candidates leave the seminars with technology resources for application in the classroom. Candidates are required to develop lesson plans in all content areas and include resources for integrating technology. For example, in Technology and Mathematics, candidates view Internet-based resources to develop instructional strategies to incorporate appropriate use of technology into mathematics instruction. Later in Using Technology to Increase Caregiver Communication, candidates prepare a plan for effective communication with caregivers using technology to enhance</p>

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
	<p>classroom management. They develop a virtual field trip for their students. This activity requires that candidates find one or more resources their students can “visit” virtually and that they structure the field trip in a way that is engaging and instructive for the students, along with being aligned to the standards of one or more disciplines. Candidates must also learn to apply their technology skills and knowledge to manage teaching and learning in the multiple subject classroom setting. The instructional resources on the course website include an “Assessment Toolbox” which provides students with tools and experience in practicing electronic assessment. Candidates are expected to maintain an electronic gradebook during supervised clinical experience. The program uses flip cameras to conduct esupervision of clinical practice. The video artifact of the teaching episode enables the supervisor and the candidate to return to the lesson multiple times in the subsequent reflective dialogue about teaching and learning. The program is in the process of developing procedures to annotate the video lesson to archive exemplary practices and to take the reflective probes deeper. The final requirement of the program—the development of an electronic portfolio for the purpose of communicating one’s professional competencies to an external audience—is the culminating example of the pervasiveness of electronic communication and the consequent development of such skills in the CalStateTEACH program. Candidates explore access to technology and the digital divide through the lens of gender, race and ethnicity, socioeconomics and disabilities. Candidates access the International Society for Technology in Education to evaluate the national standards. Candidates read Lewis and Doorlag (Teaching Special Education Students in a General Education Classroom), access Internet resources (IRIS modules) and use research studies to learn how to use technology to support special needs and gifted and talented students. Throughout the program, candidates are expected to find appropriate resources to support their instruction, discover resources that their students can use directly, and learn web and school-based management tools, especially as they pertain to assessment and the resulting instructional refinement.</p>
Chapman University	<p>The educational application of technology is a theme integrated throughout credential courses. There is also a specially designed course which provides an overview of the range of educational application of technology including computer literacy, adaptive technology, computer-assisted instruction, telecommunications, electronic grade books, problem solving, teacher utilities, networked learning environments, simulations, word processing, computer managed instruction, test construction, computer maintenance, the electronic scholar, lesson authoring, and schools of the future. Emphasis is on making significant changes in teaching and learning through technology by providing a match between instructional strategies and relevant technologies.</p>
Claremont Graduate University	<p>Our candidates are prepared to integrate technology into their curricula and instruction in a variety of ways. All are introduced to the notion of utilizing technology in their lesson planning during the first phase of the program (i.e., the Pre-Internship Phase). For example, for the multiple subject and education specialist candidates in EDUC 343 the candidates are introduced to core technology tools such as document cameras, smart boards, and multimedia presentation tools such as LCD projectors and are asked to create standards-based curricular units that utilize these tools. All candidates are also working under the tutelage of their Master Teachers in a Pre-Internship Teaching Experience and in this intimate context being trained in the effective use of technology. During the Fall, candidates work with their Faculty Advisers (their field supervisors who also teach their classes at CGU) to look at school-specific applications for grade recording and address the use of technology in their specific classrooms. In the Spring [in EDUC 330: Innovative Technology for the Elementary Classroom, EDUC 331: Innovative Technology for the Secondary Classroom, and EDUC 332: Innovative Technology for the Special Education Classroom] technology takes center stage. These classes address California’s Level I technology standards in a time-efficient manner so that Level II standards can be explored. In these classes, all candidates complete three core assignments-in-common: 1) Technology 101. This assignment/ assessment involves having the candidates demonstrate in a time-efficient manner their understanding of basic software and hardware operations; 2) The Inventory Project. This assignment has the candidates research their respective district’s policies, and practices regarding technology. They locate and make sense of their sites’ technology plan and answer the questions related to procedures, students, teach-teachers, and assistive technology. 3) Technology infused lesson plan that includes a multimedia instructional project (not PowerPoint) and a web quest. For this assignment, candidates design a multimedia project that integrates content standards; utilizes technology to facilitate instruction and student learning; considers the students’ various ELD and SPED issues (and provides appropriate modifications); considers the students’ various reading levels; promotes collaborative learning; and has a rubric-based assignment. To showcase the technology skills learned in EDUC 330/331/332, the candidates create multimedia presentations related to a core text, <i>Con Respeto</i>, in another spring</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	course (EDUC 305/606/305-SP). TEIP Faculty and Staff also model the use of technology in the teaching of our classes. For example, we utilize a content management system space called SAKAI (which allows all stakeholders to archive/retrieve articles, participate in asynchronous and live discussions, track events, send out messages, etc.), and our teachers utilize a variety of technology in their own teaching (including but not limited to multimedia presentations, video, web-based programs). The university has an “audio-visual department” that allows teacher candidates to borrow (free of charge) a variety of hardware (i.e., cameras, videos, projectors, etc). Additionally, there is a well-equipped computer lab that our candidates have access to from 8:30am - 11:30pm, 7 days a week. To instruct our candidates on using data on student learning to inform instruction, a core section of our ethnographic narrative project described earlier requires all candidates to utilize academic and personal information gathered on 5 students to design individualized education plans. Student progress is tracked and candidates reflect upon how their use of this data impacted their teaching and their students' learning.
Concordia University	Students complete an online course ("Technology Literacy for Teachers") during the first semester of their formal education courses. They are required to demonstrate the ability to collect, manage, and analyze data with the goal of improving their teaching practice and student achievement. Principals of Universal Design for learning are embedded throughout our formal core education courses. Universal Design elements are introduced during the course entitled "Planning and Assessment for Inclusive Classrooms" and is also embedded during the advanced methods courses taken in the second semester of coursework.
Dominican University of California	All four elements are in place. Technology is integrated into all of the Education classes, specifically with the Multiple and Single Subject credential programs. Students must take and pass a specific Technology course. That course requires learning and practice with specific programs that are used in K-12 Schools. Additionally, all of the Professional Education courses utilize technology and this is described in each course syllabus. Students must use databases for research, the electronic blackboard to communicate with instructors and classmates and students present their work electronically in classes. When candidates are formally assessed with the California Teaching Performance Assessment (TPA) they access and respond to that assessment on-line. The data from those Assessments is analyzed and used for program revision and improvement.
Fortune School of Education	ED 309: Technology in the Classroom (30 hours) is a course that Single Subject interns take in Year 2, and Education Specialists take in Year 3. This course is an introduction to teaching using technology and the applications of technology which will assist in effective learning within the school environment. Interns experience instructional applications on the computer and learn about a variety of educational software. In addition, different uses for technology have been implemented in our pedagogy for the Pre-Service classes.
Fresno Pacific University	1.The program prepares teachers to integrate technology effectively into curricula and instruction by requiring candidates to take EDUC 644,Teaching with Technology. In this course candidates learn the basics of using technology; using technology to support instruction; integrating new technology into classroom practice. The program prepares teachers to meet the principles of universal design for learning by teaching candidates to provide flexibility in the ways information is presented to students, in the ways students respond or demonstrate their knowledge and skills, and in the ways students are engaged in instruction and learning. In addition, Universal Design helps candidates reduce barriers in their instruction, provide appropriate accommodations, supports, and challenges, and maintain high achievement expectations for all students, including students with disabilities and students who are English learners.
High Tech High	The HTH Intern program requires candidates to attend and pass two technology courses during the two year program. Each Intern designs and manages a digital portfolio which can be viewed at hightechhigh.org. HTH uses Powerschool to collect and analyze student test scores, grades, pass rates. Universal Design is introduced and explored with Education Specialists and our general education teachers in each of the courses required. It is measured in the Teaching Performance Assessment. In Induction, teachers are provided Learning Seminars that provide strategies and applications of how to use technology to improve learning in the classroom. For example, HTH is using ALEKS, Khan Academy and ST Math programs to supplement the math curriculum.
Holy Names University	In all coursework, instructors model the use of technology in curriculum and instruction. A variety of assignments are completed throughout the programs. Some examples are: In Curriculum and Instruction courses, such as EDUC 331 candidates learn to use spreadsheets as tools for teaching mathematical concepts such as probability and descriptive statistics. In EDUC 333, candidates learn how to use spreadsheets to record and analyze data from experiments,

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	<p>and help their students to do the same. Candidates integrate computer technology in lesson plan design in EDUC 334. Computer-based strategies which enhance the writing process for students are introduced in EDUC 336.</p> <p>Productivity and presentation tools are used throughout the program. Internet resources are used to help develop and complete a project describing a culture other than the candidate's own culture in EDUC 103. In EDUC 332, candidates use appropriate websites in EDUC 102A for information for parents and educators who are involved with students with special needs.</p> <p>In relevant courses in the Programs, candidates access and evaluate software that promotes effective content acquisition by students. For example, in EDUC 332, candidates evaluate the content of websites for use in their integrated thematic instruction unit, for their appropriateness, accuracy, and anti-bias perspective. Together, in class, candidates assess and evaluate the quality of the site, compared to those presented by others. In EDUC 334, candidates review websites that introduce, promote, and advocate for a variety of perspectives on reading. In EDUC 320A and EDUC 330A, candidates identify and explore websites for their particular subject content area and use the California Department of Education website to stay up to date on content standards and curriculum frameworks; this is particularly important for multiple subject candidates, who must stay up to date on the development of standards and frameworks in each of the subject areas.</p>
Humboldt State University	<p>Candidates in the credential program are assessed for entry level technology skills. Candidates are required to verify entry level skills by either passing a technology competency test or completing a technology course (Education 285, Technology Skills for Educators) that includes basic technology and computer skills. The program entry level skills include the following: Each candidate demonstrates knowledge of current basic computer hardware and software terminology; demonstrates competency in the operation and care of computer related hardware (e.g. cleaning input devices, avoiding proximity to magnets, proper startup and shutdown sequences, scanning for viruses, and formatting storage media); implements basic troubleshooting techniques for computer systems and related peripheral devices (e.g. checking the connections, isolating the problem components, distinguishing between software and hardware problems) before accessing the appropriate avenue of technical support; demonstrates knowledge and understanding of the legal and ethical issues concerned with the use of computer-based technology; and uses computers to communicate through printed media (e.g. newsletters incorporating graphics and charts, course descriptions, and student reports). Humboldt State University collaborates with local school personnel in selecting suitable school sites for prospective teacher candidates where they can observe effective uses of technology. In collaboration with Humboldt County Office of Education school sites are identified that have District Technology Plans. In the credential programs candidates use computer applications to manage records (e.g. gradebook, attendance, and assessment records); are familiar with a variety of computer-based collaborative tools (e.g. threaded discussion groups, newsgroups, list servers, online chat, and audio/video conferences); choose software for its relevance, effectiveness, alignment with content standards, and value added to student learning; demonstrate competence in the use of electronic research tools (e.g. access the Internet to search for and retrieve information); demonstrate the ability to assess the authenticity, reliability, and bias of the data gathered; identify student learning styles and determine appropriate technological resources to improve learning; consider the content to be taught and select the best technological resource to support, manage, and enhance learning; demonstrate the ability to create and maintain effective learning environments using computer-based technology; analyze best practices and research findings on the use of technology and design lessons accordingly; and demonstrate knowledge of copyright issues (e.g. distribution of copyrighted materials and proper citing of sources). As part of the student teaching experience candidates use computer applications to manipulate and analyze data (e.g. create, use and report from a database; and to create charts and reports from a spreadsheet); interact and collaborate with others using computer-based collaborative tools (e.g. threaded discussion groups, newsgroups, electronic list management applications, online chat, and audio/video conferences); optimize lessons based upon the technological resources available in the classroom, school library media centers, computer labs, district and county facilities, and other locations; design, adapt and use lessons which address the students' needs to develop information literacy and problem solving skills as tools for lifelong learning; create or make use of learning environments inside the classroom, as well as in library media centers or computer labs that promote effective use of technology aligned with the curriculum; use technology in lessons to increase students' ability to plan, locate, evaluate, select, and use information to solve problems and draw conclusions;</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	use technology as a tool for assessing student learning and for providing feedback to students and their parents; frequently monitor and reflect upon the results of using technology in instruction and adapt lessons accordingly; collaborate with other teachers, mentors, librarians, resource specialists, and other experts, to support technology-enhanced curriculum (for example, they may collaborate on interdisciplinary lessons or cross grade level projects); and contribute to site-based planning or local decision making regarding the use of technology and acquisition of technological resources.
IMPACT (San Joaquin County Office of Education)	Two technology courses are required in addition to instructors integrating technology throughout non-technology courses.
La Sierra University	In teacher education methods classes candidates are required to demonstrate dynamic use of technology as a tool for instructional delivery and assessment. Textbooks for methods coursework are preferred choices when they include methodologies that incorporate technology. Additionally, during the candidates' field placements and formal student teaching, candidates engage K-12 students in interactive learning experiences. Candidates must show ability to effectively use technology when responding to the Teaching Performance Assessment. Several teacher education courses require candidates to use an online program for designing lessons. This model is recognized for its alignment with brain-friendly cognitive processing and with learning theory.
Los Angeles Unified School District	The District Intern Program prepares teachers to utilize technology effectively by integrating technology requirements within nearly every course throughout the program. Competency in utilizing technology is a common strand throughout each of the courses by learning how to assess the authenticity, reliability and bias of data gathered. Teachers are then able to determine how to utilize gathered data to drive classroom instruction. Finally, teachers learn to consider content to be taught and best learned by their students to support, manage and enhance student learning.
Loyola Marymount University	Program technology components are designed to engage the candidate in utilizing the internet for immediate support in their teaching, via the use of on-line web based materials (e.g., Blackboard.com, iTunes U, SlideShare). Candidates are supported in the development of technology integrated lesson plans which encompass the “start simple, start small” ideology for creating technology proficient teachers. In addition to communicating through technological means, candidates in the programs are expected to create, engage in, and manage digital lessons using freeware (e.g., Prezi, VoiceThread, etc) and purchased software (e.g., PowerPoint, Keynote, iMovie, Garage Band). Portfolios are submitted electronically via LiveText and are digital in nature. Candidates learn how to interpret data from standardized tests and how to design and use rubrics. By using database software (e.g., Excel), candidates are taught to analyze assessment data in order to track individual student performance as well as course wide attainment of academic learning goals. With the belief that effective teachers use assessment as a tool for guiding and improving instruction, candidates are taught how to use various assessments throughout the program. For example, in Methods of ELD/SDAIE, candidates learn how to use the English language development standards as a guide for determining the level of English proficiency of their students. In this class, candidates learn how to use the California English Language Development Test (CELDT) so that candidates understand how standardized tests can be used to modify instruction. Candidates also use the learning record and portfolios. They learn how to collect evidence from their students and how to interpret the evidence. Candidates in the Multiple Subject Program learn how to use running records, reading inventories, and rubrics in Literacy. Single Subject candidates learn how to write effective test questions in Literacy. In Elementary Methods and Curriculum and Secondary Methods, candidates learn how to collect and analyze evidence of student learning. Professional development continues to be provided to all teacher education faculty related to Response to Intervention (RTI) and monitoring of student achievement utilizing Aimsweb(a benchmark and progress monitoring system based on direct, frequent and continuous student assessment). The results are reported to students, parents, teachers, and administrators via a web-based data management and reporting system to determine response to intervention. We will pilot a new lesson plan based on Universal Design for Learning which will be used for all candidates.
Mount St. Mary's	Our programs prepare candidates to integrate technology effectively into their curriculum through modeling, practice, and exploration. Instructors in most courses utilize a computer-based classroom management system (Angel) that allows students to log in from campus or beyond to view syllabi, course

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
College	assignments, and grades. In addition, instructors model the use of this system to candidates. Candidates are given opportunities for practice through multiple course assignments that integrate multi-media technology into the learning process. Candidates have occasions to view and create PowerPoint presentations, participate in online discussions, and use large data bases to learn about school demographics and test scores. Candidates are also given opportunities to explore additional technology uses in their school placements.
National Hispanic University	Students develop a lesson plan integrating the use of technology. Students complete 60 hours of required coursework in technology where they generally learn how to analyze data. Most credential courses discuss data & analysis but do not specifically address how to analyze data beyond generalities. Methods classes look at assessment, data collection, data analysis and implementation strategies. For example, the 6 unit reading course requires students to assess a student using multiple assessments, analyze the results, and prepare an instructional plan based on the data collected.
National University	Programs for prospective teachers include preparation to use technology effectively for a variety of purposes per state standards. We offer a technology course that is a program prerequisite in order to ensure that candidates have a foundational ability to use technology for teaching and learning. In addition, each program has an identified learning outcome addressing technology and its use in improving teaching and learning. All university courses are taught with the support of an e-companion. Candidates have seen the ways that faculty integrate technology and use it to improve teaching and learning. They are encouraged to use these ideas in their clinical practice based upon the technology available to them in their schools/districts. One of the Teaching Performance Tasks (Task 3) focuses on the use of assessments in order to improve teaching and learning. Candidates are encouraged to use technology to complete this task. Their ability to do so is based upon the technology available at the school/district. Candidates are placed in schools districts that have a variety of technology. Faculty are currently preparing candidates for the use of SmartBoard technology in their student teaching placement. This can be done on-ground at many of the centers and cameras make it possible to capture instruction as video for use in on-line courses.
Notre Dame de Namur University	TaskStream training incorpoated into PACT. Will be incorporated into SPED fall 2011.
Oakland Unified School District	Throughout pre-service training and school year seminars, participants must demonstrate technological literacy. All participants regularly use a web-based tracking system called Certification Track. In Certification Track, participants view assignments, track their own tuition payments and attendance, and access and read required documents from the program. Seminar Leaders (SLs) use and model collaborative technology-based tools with their participants. In seminar sessions, SLs regularly highlight ways technology may be used to enhance curriculum. This may include modeling appropriate uses of technology (e.g., use of a PowerPoint presentation, projectors, graphing calculators, Excel spreadsheets, online collaboration tools, etc.) to specifically demonstrate how technology can support and boost student learning. Seminar Leaders are charged with connecting technology to best practices in the classroom, particularly its uses in creating standards-based lessons and units, using High Impact Teaching Strategies (HITS), and applying differentiated instruction. Seminar Leaders guide participants in exploring how technology resources can be used to help develop lesson plans that are engaging, and that meet the individual learning needs and goals of all students. Participants explore lessons that integrate State standards and technology. This gives participants tools they can take back to their classrooms to help students both understand content and develop technology skills. During seminars, participants are asked to examine a variety of educational technologies. Seminar Leaders model best practices and provide information about evaluation tools such as national education technology standards, software, and internet evaluation tools in order to help participants become critical consumers of education technologies. As participants explore ways to integrate technology into their lesson plans and instructional strategies, they consider how certain technology resources can help them differentiate instruction for their students. Spreadsheet software is endorsed as an excellent way to track student performance and identify trends. Under the guidance of SLs, participants learn to identity, review, and evaluate technology and to determine whether the technology helps students who are behind or students who are outperforming their peers. As with any newly discovered and effective resource or strategy, participants are encouraged to share their experiences during seminar sessions to enhance collaboration among the cohort.

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	As participants implement High Impact Teaching Strategies (HITS) in their teaching practice, program instructors and staff provide additional technology resources by directing participants to program and district resources.
Orange County Office of Education	<ol style="list-style-type: none"> 1. Review technologies that improve the quality of life of individuals with disabilities. 2. Analyze and reflect on best practices and research findings about the use of various technologies and design lessons accordingly. 3. Compile or locate a site/district directory of collaborative technology professionals available at his/her school site, within their district, and throughout the community as well as listing of local agencies available to both the instructional staff and the family. 4. Recognize and assess the relationship between various technologies and academic subject mastery. 5. Identify which technologies are appropriate for certain disabilities. 6. Adapt teaching tools for learning input and output: visual and auditory. 7. Demonstrate how to assess and select compatible software. 8. Use research and theory to conceptualize and implement a classroom technology program for his/her students. 9. Demonstrate an understanding of how to use age-appropriate technologies for augmentative and alternative communication, desktop publishing, and word processing. 10. Design a classroom environment that allows for increased mobility, computer access, and elimination of visual and auditory barriers. 11. Exhibit intellectual integrity, engage in a continuous program of professional development, demonstrate the ability to accept professional advice, and assess his/her progress. 12. Demonstrate the ability to link theory and research with practice and then reflect upon his/her practice. 13. Plan and use instructional strategies, activities, and materials that appeal to and challenge diverse interests, utilize individual strengths, and accommodate various styles of communication and learning. 14. Analyze, compare, and evaluate the roles of relevant technology for use in ongoing assessment and instruction. 15. Evaluate instructional software and develop lesson plans that incorporate software programs and other technologies.
Pacific Oaks College	Although our programs prepare teachers to collect data as part of improving their teaching practice, the program does not specifically facilitate the use of technology as a means of data collection. The data is both qualitative and quantitative, and is usually "reported" through assignments qualitatively, through narrative. A course has been developed (and will be implemented in all credential programs in Summer 2012) which will address the integration and use of technology.
Patten University	Pre-requisite Basic Computer skills required. Level I embedded in Credential program as part of State SB 2042 program requirements. Level II required during Induction Program in preparation for Professional Clear Credential.
Pepperdine University	Teachers learn to integrate technology into curricula and instruction through their coursework. They also use technology to complete their Performance Assessment for California Teachers assignment which is an exercise in meeting all of these goals. Teachers video themselves teaching students and examine the video to analyze student outcomes and teaching quality.
Point Loma Nazarene University	Throughout credentialing coursework, candidates are required to use technology as a tool for instruction. In the assessment course (EDU 603), candidates use technology to collect data and analyze results to improve instruction. All candidates examine grading and course management software in the subject specific methods courses. During clinical practice, candidates are required to use presentation software to deliver instruction. Finally, all candidates experience course management software as students themselves throughout the program.
San Diego City Unified School	To support the Teacher Credentialing Technology Standards, the General Education Teacher Intern Programs (GETIP) addresses the General Knowledge and Skills (GKS) and Specific Knowledge and Skills (SKS) standards through the Level I technology course, MS/SS111 Teaching and Learning with Technology,

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
District	<p>and MS207/SS206 Using Technology in the Classroom. These courses provide candidates with a two year development of professional and personal technology competency that is aligned with the California Technology Standards for the Teaching Profession. Technology is embedded throughout the entire Professional Development Plan. Candidates are further expected to implement technology in their classrooms. Candidates with high level technology skills and proficiency may challenge the course. In addition, candidates having met the technology at a university are exempt from taking the Level I technology class.</p> <p>As candidates complete activities and projects assigned during coursework, they are required to use technology as a productivity and communication tool. Candidates use electronic mailing to communicate with support providers, instructors, supervisors, colleagues, and parents. As candidates gain confidence and competency in their use and understanding of technology, they are encouraged to use technology to enhance teaching and learning. Candidates continue to develop and use skills to support teaching and learning with technology during the Level II technology course MS207/SS206 Using Technology in the Classroom and demonstrated their technology proficiency through the Performance Assessment for California Teachers (PACT) Teaching Event (TE) electronic portfolio and exit Interview.</p> <p>In MS103 Theory and Methods of Beginning Reading Instruction, MS105 Teaching Mathematics in the Bilingual Classroom, MS203 Assessment and Diagnosis, and MS204 Teaching Science in the Bilingual Classroom candidates use grade-level appropriate software to create lessons.</p> <p>In SS107 Second Language Acquisition and Academic Language Development, candidates audiotape and videotape student conferences that might include anecdotal records.</p> <p>In MS/SS111 Teaching and Learning with Technology, candidates develop competency in teaching and learning with technology that is aligned with the TPEs. Candidates are pre and post tested in this course in order to measure progress for meeting state technology standards.</p> <p>In MS204 Teaching Science in the Bilingual Classroom, candidates search for available online, age-appropriate materials for lesson plans and activities.</p> <p>In MS/SS109 Inclusion of Special Populations, candidates receive information on learning styles and recommend software programs to address learning styles.</p> <p>In SS202 History and Philosophy of Education, candidates use video to record classroom activities as evidenced of accountable talk.</p> <p>Candidates are provided opportunities to explore various viewpoints regarding the use of technology in the classroom. Through individual assignments and group discussions, they explore best practices and effective ways to implement technology to enhance teaching and learning. Throughout all coursework, interns incorporate current technologies when designing and implementing lessons, and are required to reflect on the effectiveness of the use of technology during their lessons. The technology strand is articulated throughout the two year Professional Development Plan.</p> <p>During technology coursework, candidates use a wireless mobile lab to complete assignments and projects. The use of this lab allows candidates to continue developing proficiency in information technology as it pertains to their profession and personal competencies. During the use of the mobile lab, candidates learn the basic terminology used in technology as well as the names and use of other peripheral devices. They demonstrate their ability to communicate effectively about technology using accurate terminology. As they become more competent in their use of technology, candidates are expected to transfer this knowledge to other coursework and their own classroom. Candidates receive direct instruction on how to troubleshoot common problems encountered with computer hardware, software programs, peripheral devices, and operating systems. Candidates create and store electronic documents and media on the programs' Share Point server location while developing their PACT electronic portfolio.</p> <p>Candidates use word-processing programs and templates to create short- and long-term lesson plans and assessment instruments, communicate via email and use the internet for research and access to educational resources in all their courses.</p> <p>In MS102 Diversity and Teaching in the Urban Setting, MS103 Theory and Methods of Beginning Reading Instruction, MS107 Practice Teaching I, MS108 Practice Teaching II, MS206 Practice Teaching III, and MS207/SS206 Using Technology in the Classroom, candidates use a wireless mobile computer lab to complete course assignments.</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	<p>In MS/SS111 Teaching and Learning with Technology and MS206 Practice Teaching III candidates use a wireless mobile computer lab, troubleshooting problems encountered during the use of the lab.</p> <p>In MS110 Philosophical Foundations of Public Education, MS206 Practice Teaching III, SS105/106/201, Practice Teaching I, II, III, and MS207 Using Technology in the Classroom, candidates use a camcorder to record their instruction and interactions with the students which can then be edited through computer based technology.</p> <p>In MS/SS111 Teaching and Learning with Technology and MS207/SS206 Using Technology in the Classroom candidates are introduced to legal and ethical issues concerning the use of technology, and receive instruction on issues of cheating and plagiarism, copyright laws, and digital and print research citations in subsequent courses. They are given information about district procedures regarding the use of the district's network. Candidates are also informed about the Acceptable Use Policy used in the district to obtain parental permission before students have Internet access or before they publish student work and/or photos taken in their classrooms. They are also instructed on district guidelines and procedures regarding the publication of students' work and photos taken in the classroom. Candidates learn to identify and explain important issues surrounding legal and ethical use of technology tools. They establish classroom procedures and policies to address those issues to elicit appropriate student use of technology. In addition during the technology course candidates complete assignments base specifically on legal and ethical issues pertaining to educational use of information technology.</p>
San Diego State University	All teaching credential candidates are required to take an Educational Technology course. This course introduces teachers to the possibilities and potentials of computer technology for education. The goal of this course is for pre-service teachers to begin to use a wide variety of computer-based technology for both professional and instructional use. Technology is also integrated into most courses throughout the program.
San Francisco State University	<p>Integrating Technology</p> <ol style="list-style-type: none"> 1. Instruction in uses of educational technology to support student learning and assessment and to manage data to improve teaching and learning is infused throughout the methods courses in all credential areas. In addition, credential candidates must complete a one-unit stand alone course, ITEC 601, to meet the Level One technology requirement to earn a preliminary credential. 2. Faculty and credential candidates in all courses use iLearn (https://ilearn.sfsu.edu), a Learning Management System (LMS) that SF State has adopted to enhance online student learning and collaboration. Whether an instructor uses iLearn to merely supplement a course or teach an entire class online, instructors may customize their use of iLearn features by mixing and matching technology that best fits the course objectives and student needs. Using this LMS becomes a model for candidates to use in K-12 schools. Instructors may use iLearn to enhance teaching and learning in the following ways: <ul style="list-style-type: none"> - Sharing resources and posting all course documents online. - Facilitating student interactivity and collaboration through assignments to participate in online Forums. - Assessing student performance online - Gathering student feedback. 3. Secondary and Elementary Education Departments use the digital TaskStream System to upload candidate responses (which include student-teaching videos) to the Performance Assessment for California Teachers (PACT). This assessment is a culminating experience required by the State of California. All candidates in are required to purchase a TaskStream account during their first semester in the program. This on-line resource is used for the culminating assessment during the candidates' enrollment in their second semester final student teaching seminar. Other resources available to candidates using TaskStream are outlined below: <ul style="list-style-type: none"> - Accountability Management System (AMS) is used at the national, state, provincial, county or district level to articulate the mission and goals of secondary education programs; identify criteria and measurements of successful achievement of defined outcomes; establish quality review processes; record assessment data and analysis versus articulated goals; and provide robust continuous improvement capabilities for identifying findings and tracking the disposition of

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	<p>follow-up action items.</p> <p>- Learning Achievement Tools (LAT) by TaskStream is used at the national, state, provincial, county, district or school level to efficiently organize and demonstrate individual and programmatic achievement of articulated standards, skills or competencies. Examples of these programs include graduation portfolio projects, articulation programs for educational advancement, Career Clusters, P-20, and 21st Century skills initiatives, writing programs, among others.</p> <p>4. Technology is used to manage and deliver instruction to candidates through LCD Projectors to present course content; the appropriate use of PowerPoint software is addressed and applications is, word processing software used in all credential courses. Other courses use excel and other specialized software programs.</p> <p>5. Universal design for Learning is covered in student teaching support seminars and in the adolescent development course required for all single subject credential candidates.</p>
San Jose State University	<p>Students in the Credential program must fulfill basic technology requirements either through coursework or our technology exam as a prerequisite to entering our program. These prerequisite requirements verify each candidates proficiency in the use and trouble shooting of technologies, tools and resources commonly found in educational settings. These technologies, tools and resources include, but are not limited to, computers, LCD projectors, email, Internet websites, and common software (word processing and spread sheets). Once they have begun the credential program, they get additional instruction and assessment embedded in their methods course, foundations courses, and field experience. In the more applied setting, candidates learn to use technology, tools and resources meaningfully in classroom settings. They learn to:</p> <ul style="list-style-type: none"> •use new video technologies and editing software for course projects •search for, critique and integrate online resources like online video demonstrations, digital archives, lesson plans, and educational websites •develop lessons around technologies and software like podcasts, video, projectors, smart boards and presentation software •use standard software for recording, managing and reporting grades and/or to prepare reports •use common communications programs like listservs, groups, and social networking sites <p>Our program does not currently have embedded instruction in universal design for learning (UDL), however, our plan is to integrate instruction in this area into EDSE 192: Mainstreaming the exceptional student.</p>
Santa Clara University	<p>Our teacher education programs emphasize three different ways in which teachers integrate technology into their practices: by teaching academic content to students using technology as an instructional tool; by creating activities and experiences in which students use appropriate technologies in meaningful ways to reach standards-based curriculum goals; and by using technology to document student learning, to collect, manage, and analyze student achievement data, and to represent student achievement in ways that facilitate the use of data to improve instruction. All teacher education course instructors strive to model the effective use of a variety of familiar technologies (such as digital cameras, smart phones, iPads/tablets, cell phones or mp3 players with voice recording capabilities, text messaging, and social networking) and basic software commonly found in K-12 classrooms (such as Excel, PowerPoint, and Microsoft Word) in our own teaching. We also give our teacher candidates a range of opportunities to have hands-on learning experiences with hardware, such as graphing calculators, and software, such as Geometer's Sketchpad, commonly found in classrooms.</p>
Sonoma State University	<p>Elementary/Multiple Subjects: Technology is integrated into courses where appropriate for instruction. The use of web-based, video clips, software, and graphic organizer tools are a few of the teaching strategies taught and modeled in the program. For mid and final semester evaluations of candidates, web survey tools are used to help collect and aggregate data. The platform LiveText is used for portfolio assessment of candidates at the mid and final point in the program, which includes candidates' submissions of coursework and rationales for instruction. The mandated PACT (Teaching Event) is also submitted and assessed by all final-semester candidates via LiveText. These LiveText submissions and the related evaluations become the source for department analysis for program improvement. Secondary/Single Subject: Faculty in the program model the use of technology via the use of Moodle and in Phase 1 courses. This will</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	significantly enhance faculty's ability to use technology in their instruction. Using the Performance Assessment for California teachers (PACT), we ask students to use online and digital technologies to development and submit their PACT teaching event. All PACT and program assessment data is managed using various technology-aided strategies. Student teaching evaluations are completed online as well as all program-critical assessments and are analyzed. Feedback loops exist for examining all data via PACT and the critical assessments to help improve student learning. These data are discussed in monthly department meetings. Education Specialist: In response to recent state-wide changes in the preparation of Education Specialist (ES) candidates, SSU now provides all candidates with multiple experiences that help them integrate technology into their teaching. To this end, we offer EDSP 421C - a class that specifically addresses the effective use of technology in our educational environments. Additional ES courses extend this knowledgebase as candidates learn to apply the effective use of educational and assistive technology. As well, our ES candidates are well versed on the principles of Universal Design for Learning. Targeted lessons and related experiences in EDSP 400 and EDSP 425 offer our candidates the knowledge and skills that enable them to understand and apply the principles of UDL directly into their teaching environments.
St. Mary's College of California	Candidates in the Single Subject and Multiple Subject Credential Programs use the PACT TPA which incorporates all of the descriptions above in addition to specific coursework required in the program. http://www.pacttpa.org/_main/hub.php?pageName=Home Candidates in the Education Specialist Credential Program are required to take as part of their coursework an Information Literacy and Technology course and an Instructional Strategies course which gives opportunities for effective practice. Both pieces are integrated to writing effective and relevant IEP goals and objectives. Candidates in the Multiple Subject Credential Program take the course MSTE 223 Technology in the Classroom, which was designed specifically to include all four elements listed above. In addition, the use of technology is integrated into all other courses; for example, candidates create a class Wiki for children's literature in MSTE 253 Reading and Language Arts I; candidates create a multimedia project for MSTE 345 Curriculum & Instruction: Social Studies and Humanities; and candidates create tables summarizing student performance on a mathematics test in MSTE 350 Curriculum & Instruction: Mathematics; these data are then used to write plans for improving the learning of the entire class as well as two children with specific learning needs.
Stanislaus County Office of Education	Intern teachers take one technology class (SEI 752/852 Educational and Assistive Technology) during the second year of their two year program. Interns learn how technology can be used to enhance instruction and promote personal productivity. Privacy, copyright, safety and acceptable use policies are covered throughout the course. Interns also learn how to utilize technology to collect and analyze data to improve instruction. Universal Design principals and the use of high and low assistive technology equipment and materials are reinforced throughout the course.
Touro University	Touro University-California's College of Education provides opportunities for candidates to learn and use appropriate computer-based technology. Candidates enter the program with a wide range of technology skills, and they develop those skills throughout the program. The use of technology is one aspect of instructional design embedded in every course and every school-based learning experience. Each course includes an online Blackboard component, and candidates post all Key Assignments on TaskStream for instructor comments and assessment. Each candidate shows competency in the thirteen TPEs through an online Teaching Portfolio, collected on TaskStream. Each candidate who is recommended for a preliminary teaching credential has a basic understanding of technological proficiency and an understanding that continuation of skill development in this area is fundamental to professional development. TEACHING & LEARNING WITH TECHNOLOGY Candidates use appropriate technology to facilitate the teaching and learning process. Each candidate learns to use appropriate technology and, in turn, how to use the same technology in the teaching and learning process. In literacy and curriculum and instruction courses, as candidates become familiar with writing units and lessons, accessing the California State Curriculum Standards, and developing appropriate rubrics on TaskStream, they learn how to use the same technology when teaching their students. After learning to conduct electronic database searches in class, candidates are encouraged to use the same research skills when teaching their K-12 students. Candidates demonstrate knowledge and understanding of the appropriate use of computer-based technology for information collection, analysis, and

Technology *continued* – Alternative Route

Program name	<p>Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.</p>
	<p>management in the instructional setting. Beginning in iLearn orientation, candidates become familiar with the electronic education resources in the Touro University library, how to access the databases, and how to retrieve peer-reviewed journal articles. Many courses include a summary of a journal article. The curriculum and instruction courses include methods of student data collection and grading systems appropriate to K-12 classrooms. Candidates analyze best practices and research on the use of technology to deliver lessons that enhance student learning. Candidates research interactive online websites that support teaching units in the literacy courses. Candidates use free internet sites that support curricular areas. In the advanced curriculum and instruction courses, candidates create their own webpage with appropriate web 2.0 resources for parents and students. Candidates demonstrate competence in the use of electronic research tools and the ability to assess the authenticity, reliability, and bias of the data gathered. The Touro University librarian who is the liaison to the College of Education conducts frequent workshops for our classes in how to access reliable peer-reviewed journal articles and research reports on relevant topics. All candidates received multiple opportunities to demonstrate competence in the use of electronic research tools.</p> <p>EQUITABLE ACCESS TO TECHNOLOGY</p> <p>Candidates integrate technology-related tools into the educational experience and provide equitable access to available resources to all students. All students K-12 have access to free web 2.0 technology and resources, so candidates are encouraged to become familiar with these resources for use with their students. Candidates participate in free webinars made available from WestEd’s Schools Moving Up, create their own web pages of online resources appropriate for K-12 students and their parents. Candidates understand that equitable access to available resources to all students is important in closing the digital divide. Candidates encourage the use of technology with students in their research, learning activities, and presentations. As candidates learn how to use technology, they are encouraged to use the same technology with their students. Candidates create rubrics online in TaskStream when writing lesson plans, effective online research skills, appropriate web 2.0 online resources, and PowerPoint presentations, among many other resources. As candidates become familiar with these new technologies, they incorporate them into their own lessons and teach their students to use similar resources.</p> <p>EVALUATING & SELECTING EFFECTIVE TECHNOLOGIES</p> <p>Candidates develop the ability to evaluate and select a wide array of technologies for relevance, effectiveness, and alignment with state-adopted academic content standards, and the value they add to student learning. In the advanced curriculum and instruction courses, candidates explore a wide variety of online resources specific to their curricular area. Candidates evaluate those resources in terms of state-adopted content standards and the value they add to student learning. The most effective online resources are included in their own webpage design.</p> <p>LEGAL & ETHICAL ISSUES RELATED TO TECHNOLOGY USE</p> <p>Candidates demonstrate knowledge and understanding of the legal and ethical issues related to the use of technology, including copyright issues and issues of privacy, security, safety, and acceptable use. Beginning in iLearn, candidates learn about their own legal and ethical issues related to the use of technology before signing an Appropriate Use Policy for Touro University. In each lesson plan, candidates state sources of information, a bibliography of sources cited. In the orientation to TaskStream, candidates are made aware of privacy issues related to posting student work, photos, and names outside the secure server. In the final seminar: EDU 781: Student Teaching & Seminar, candidates review the legal and ethical issues related to the use of technology in K-12 classrooms.</p> <p>USING TECHNOLOGY TO ACCESS STUDENT LEARNING</p> <p>Candidates use computer applications to manipulate and analyze data as a tool for assessing student learning, informing instruction, managing records, and providing feedback to students and their parents. The literacy courses and curriculum and instruction courses include methods of student data collection, data analysis, and grading systems appropriate to K-12 classrooms.</p> <p>USING TECHNOLOGY FOR COLLABORATION & COMMUNICATION</p> <p>Candidates learn to use a variety of technologies to collaborate and communicate with students, colleagues, school support personnel, and families to provide the full range of learners with equitable access to all school and community resources. As stated above, candidates are encouraged to use web 2.0 resources</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	that are available to all learners with access to the internet. Candidates become adept at using email, webinars, digital discussions, online resources to supplement content learning, and electronic research materials, among other resources. Candidates submit course assignments electronically, prepare their Teaching Portfolio electronically, post Teaching Performance Assessments (TPAs) electronically during EDU 780 and EDU 781, and communicate with their instructors and classmates electronically in all courses. Candidates are proficient in technological understanding by the end of the credential program.
University of California, Irvine	<p>SS Candidates</p> <p>Instruction and practice in technology is integrated across coursework and field experiences. All SS Candidates take ED334 Literacy and Technology in the Secondary Classroom that is designed to "teach strategies for incorporating, tools for evaluating and selecting, learning theories for understanding" how technology can be utilized in secondary classrooms. Course work in each of the SS methods courses includes instruction and practice in using technology in the core subject: English, mathematics, music, science, social science and world languages. Candidates learn how to use technology in the classroom for instruction, class management, assessment and reflection on practice with the ultimate goal of increasing student achievement. In addition, candidates learn principles of universal design in a foundational course that is linked to field-based experiences: ED305/315 Learning to Learn from Teaching in Secondary schools. In addition, candidates learn to apply these principles in two courses that are linked to their observation/participation experience and their student/intern teaching experiences: ED302/319 Directed Secondary Experiences and ED307 Student Teaching in Secondary Schools. Applications are also discussed in courses such as ED328 Theory and Methods of Instruction of Special Populations in the General Education Classroom; ED329 Theories and Methods of English Language Development Applied to Elementary Students; ED327 Foundations of Equity and Diversity for Elementary School Teachers; and ED332 Creating a Supportive and Healthy Environment for Student Learning in the Elementary Classroom.</p>
University of California, Riverside	Each candidate is required to incorporate technology into the curriculum by using multimedia tools such as PowerPoint and Windows Movie maker to design lesson plans. Lesson plans are developed, along with copies of instructional and assessment materials, and video clips that will be reviewed in the California license requirement known as the teaching performance assessment (TPA). As part of this assessment, candidates are required to analyze student performances and identify patterns of student performance across the whole class and within subgroups. This analysis is used to develop specific strategies in instruction that address the needs of individual students, subgroups of students, and whole class patterns. The principles of universal design are utilized in that candidates are required to demonstrate instructional strategies in multiple ways, such as the use of written and oral presentation, manipulatives, physical models, visual and performing arts, diagrams, non-verbal communication, and computer technology.
University of California, San Diego	<p>The EDS program is cohort-based. The MS cohort includes approximately 44 candidates annually in a combined credential-M.Ed program as well as 6 candidates in a two-year MA program. These MA students receive both MS and Special Education credentials (Education Specialist: Deaf/Hard of Hearing). The SS cohort includes approximately 40 candidates annually across three SS areas: Math, Science and English/Language arts.</p> <p>All MS/SS candidates take a required course at the beginning of their program entitled "Technology, Teaching and Learning" (EDS 203). In this course, they learn to integrate technology effectively into curricula and instruction. This course reviews current literature on effective applications of technology in the classroom. Students become fluent in the use of productivity tools, presentation software, and Web development for teaching and learning; critique software relevant to their area of teaching; and develop an educational activity based on their review of the literature that harnesses the power of technology.</p> <p>All SS candidates plus MS pursuing the M.Ed degree take a required course called "Technology and Professional Assessment" (EDS 204). Advanced techniques for using network-based resources for teaching and learning are introduced. Students review relevant research on advanced technologies related to assessment of professional performance and student achievement. Students present a Web-based professional Teaching Performance Assessment Portfolio that reflects teaching performance during their student teaching or internship field experience. The combined MA-MA/EdSpec program emphasizes the use of technology as part of an approach to visual learning strategies. Candidates learn to use advanced applications for instruction as well as to collect, manage and analyze student data to improve teaching and learning as part of their year-long methods sequence, ASL-English Bilingual Practices (EDS 342ABC) and their MA seminar in the second year (EDS 240A – Research in ASL-English Bilingual Education). Use of technology to collect, manage and analyze data is further</p>

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
	embedded for all MS/SS candidates in their methods courses and student teaching/internship seminar courses (EDS 361ABC; EDS 369AB; EDS 373/374/375; EDS 379ABC). Candidates design and analyze assessment data as part of their student teaching or internship practice and present highlights in the culminating professional portfolio. Each candidate demonstrates the ability to design assessment, analyze results and monitor K-12 student progress as part of the PACT teaching performance assessment required for licensure.
University of LaVerne	The teacher education program integrates technology into teaching practice through communication and learning activities that serve curriculum objective and educational goals to enhance learning for the target students. These goals are to facilitate more effective teaching strategies in ways that interest, excite, and challenge students to contemplate and evaluate effective teaching practices and understand technologies that can benefit content delivery. Areas of training content include the use of interactive whiteboards, participatory student response systems, mobile learning tools, media-rich learning resources, collaborative tools (wikis, blogs, etc.), web site creation, electronic rubric creation, electronic teaching portfolios, data aggregation and syndication, etc. Students are required to design computer-enhanced instruction that motivates and engages students from diverse backgrounds in the active construction and / or evaluation of new knowledge and foster the building of habits and attitudes that support lifelong learning. Candidates are also expected to analyze, discuss, and implement current theory and research related to education technology and to develop lesson plans which effectively integrate technology to facilitate instruction and enhance learning. Technology is infused into courses and program to prepare candidates for the advanced technological requirements of learning environments ranging from technology-assisted on-ground classrooms to fully-online learning platforms. Credential candidates must effectively demonstrate criteria which surpass the State's required Level I technology skills. Students are also required to generate and collect evidence toward a CSTP-based electronic teaching portfolio throughout the program.
University of Phoenix	The use of technology is integrated throughout our curricula and instruction in University of Phoenix teacher education programs. Some of the resources that are located on the online course materials page include the College of Education Web Links, an electronic-portfolio system (TaskStream), and the Virtual School Portal. Through the College of Education Web Links, students are introduced to a variety of online resources and Web 2.0 tools that can be used for course assignments and for instruction in their own classrooms. Students use the TaskStream e-portfolio to upload completed benchmark assignments. Faculty members score the posted assignments using assignment rubrics and provide feedback to the students in order to improve their academic work. The Virtual School Portal is a virtual school environment that provides a look at possible situations that may be encountered in schools. The Virtual School is incorporated into course work and assignments. For example, one resource it contains is continually changing test score data that can be used to practice analyzing student learning and planning for academic success. In addition to these online resources, students are exposed to a variety of technology tools that are modeled by their instructors throughout the course of the program and they are given opportunities to incorporate the use of the tools in their assignments and reflect on how they would use them in their own classroom to increase student achievement.
University of Redlands	Technology is integrated in all courses. Current use of Taskstream for all lesson design planning includes principles of universal design for learning.
University of San Francisco	The special education program integrates training on technology for teacher use, student use, and assistive technologies. Interns receive instruction on use of audio/visual equipment such as wireless microphones, video cameras, and editing software. They create video projects, use presentation software, and classroom presentation devices. Interns learn to use concept mapping software, build websites that provide limited access to selected Internet sites for their students, use online freeware for students to practice new skills, learn how to determine appropriateness of web resources, learn how to create lesson plans and curriculum units using available technologies, develop assessments, and build student activities and web quests using web-based tools. They learn to use formal assessment software for determining students' academic levels and curriculum based measurements for formative assessments. They also receive direct instruction on the appropriate uses for assistive technologies such as specialized keyboards, listening stations, spell checkers, assistive writing and word prediction software. During the program interns create technology portfolios that demonstrate their proficiency in these areas.
University of	Candidates teach a micro lesson, include special topics in an educational technology presentation, and develop a "webquest." The lesson and "webquest" must

Technology *continued* – Alternative Route

Program name	Provide a description of how your program prepares teachers to integrate technology effectively into curricula and instruction, and to use technology effectively to collect, manage, and analyze data in order to improve teaching and learning for the purpose of increasing student academic achievement. Include a description of how your program prepares teachers to use the principles of universal design for learning, as applicable. Include planning activities and a timeline if any of the four elements listed above are not currently in place.
the Pacific	be developed by using California content standards. Candidates understand English language development strategies and talk about using them to teach technology in a discussion board. Candidates also include uses of technology to assist students with exceptional needs. Candidates use EXCEL to teach a lesson. Candidates are given opportunities to use a smartboard and clickers in a demonstration room in the Center for Teaching and Learning. During internship, candidates use information technology systems in one public school for managing and analyzing data such as STAR testing, benchmark assessments, and content specific data management systems.
Whittier College	<p>The Whittier College Teacher Education Program prepares teachers to integrate technology effectively into curriculum and instruction by:</p> <p>(1) Requiring reading “best practices” for instructional technology use and reading on research on evaluation of technology use in courses throughout the program.</p> <p>(2) Including assignments that requires students to review and evaluate various software packages and Net resources in both foundations courses and curriculum and methods courses;</p> <p>(3) Requiring students to include uses of technology in the teaching plans that they design for assignments in foundations and for curriculum and methods courses, and by providing and providing feedback on the instructional and curricular uses of technology in their plans.</p> <p>(4) Modeling the effective integration of technology into curriculum and instruction throughout courses in the teacher education program. For example, students work with course management systems in nearly every course; they student and learn course content using diverse sftware packages, Webquests, an interactive online resources; they routinely participate in online discussion groups and make presentations online or using multimedia software.</p> <p>The program prepares teachers to collect, manage, and analyze data for instructional improvement in the two courses. One is a technology course which most students take, which teaches students how to manage and analyze data with software such as Excel and SPSS. The second is a course called Educational Inquiry, which requires students to collect, manage, and analyze data for instructional improvement in an individual inquiry project.</p>

